

Appl. No. : 10/017,507  
Filed : December 13, 2001

### REMARKS

Amended claim 1 now includes the limitation that the chamber, inlet port, outlet port and transfer port between the first and second chambers are all integrally formed within the head so as to form a single unit. By integrally forming all of these components within the head the number of components which make up the water purifying unit is significantly reduced. The reduced number of components results in a water purifying unit which is easier to assemble and cheaper to manufacture. A water purifying unit including a head and a diverter as defined in claim 1, enables the head to be molded as a single unit and is therefor able to withstand much higher static water pressure levels and thus the life of the water purifying unit is extended. It will also be appreciated that a water purifying unit in accordance with claim 1 will be able to maintain its water purifying capabilities despite any creep in the component parts thereof. This is due to the sealed fit between the diverter which is arranged to be mounted in the head and its associated filter cartridge.

In the Office Action, the Examiner rejected claims 1, 8 to 14, 20 to 22, and 26 under 35 U.S.C. § 102(b) as being anticipated by Bailey et al (US 6,001,249). The Applicants have reviewed Bailey and note that the described manifold means includes a separate manifold chassis 44, locking rings 39, 41, manifolds 46, 48 and a lower base portion 42. These components combine together to form a manifold arrangement having a first and a second chamber, an inlet port, an outlet port and a transfer port between the first and second chambers. However, the manifold arrangement of Bailey is not an integrally formed unit as required by amended claim 1, but rather a series of separate components. The use of a large number of separate components is disadvantageous because they are cumbersome to handle and because it is more expensive to manufacture and assemble a unit with many components. Additionally, every additionally component in the unit increases the possibility that the unit may malfunction due to a seal failure between connecting components.

It is also noted the Bailey is not arranged so that a sump can be attached to each of the first and second chambers. Claim 1 includes such a limitation and also requires that the filter cartridges be located within an associated sump. Instead, Bailey teaches an arrangement for use with filter cartridges having a filter body 90 containing a filter media 94. This form of filter cartridge is more expensive than the type used in conjunction with the present invention because

**Appl. No.** : 10/017,507  
**Filed** : December 13, 2001

it includes a complete filter body 90 which houses the filter media 94, rather than a simple end cap 46 connected to the filter element 59 (See our figure 3). It will be appreciated that the filter cartridges must be regularly replaced and thus it is important to minimise the cost of the disposable cartridges. This is achieved in the present invention by including the sump as part of the unit, rather than with the filter cartridge.

In the Office Action the Examiner has also rejected claims 2, 14, 15 and 17 to 19 under 35 U.S.C. § 103 as being unpatentable over Bailey in view of Burrows (US 5,045,197). The Applicants have reviewed Burrows and note that it relates to a reverse osmosis water purifying system. The system includes a header manifold which is adapted to receive and support a plurality of removable cylindrical canisters having a reverse osmosis cartridge and associated filter cartridges installed therein. The header manifold is formed with a main gallery passage 90 which is subdivided into a succession of bores of progressively increasing diametric size, with adjacent bores being separated by transition segments of uniform thread pitch. Appropriate threading is installed along the gallery passage 90 to regulate water flow in series through the reverse osmosis and filter cartridges to separate the tap water supply into the relatively purified water supply and a reject water supply having impurities concentrated therein.

As shown in Figure 4 of Burrows, the manifold includes an inlet port 66 which connects to the chamber 68 surrounding the pre-filter cartridge 50. Water passing through the cartridge 50 flows through to a control port 74 which is selectively opened or closed by a diaphragm type shut off valve 76. Under certain water pressure conditions, the pre-filtered tap water flows through the control port 74 to a main gallery passage 90 formed within the header manifold 12 for further processing at the reverse osmosis stage 16 and the post filter stage 18. The main gallery passage 90 extends linearly from the control port 74 to an outlet port 93 associated with the tank fitting 26 at the opposite end of the header manifold 12.

It is important to note that the header manifold 12 described in Burrows does not teach the use of a diverter which divides each of the chambers which hold the filter cartridges into an inlet zone and an outlet zone as required by current claim 1. Rather, Burrows includes a series of side ports 116, 128 stemming from the main gallery passage to direct the flow of water into the inlet side of each of the chambers in which the cartridges 58, 60 are located. It will also be

**Appl. No.** : **10/017,507**  
**Filed** : **December 13, 2001**

appreciated from Figure 4 that the cartridges are attached directly to the header manifold 12 rather than to a diverter as required by claim 1 as currently amended.

As stated previously, Burrows describes a reverse osmosis water purification system which includes an osmosis cartridge and two associated filter cartridges. The operation of such a purification system is different to the operation of a water purification unit in accordance with the present invention. One of the fundamental differences between these different systems is that the system described in Burrows separates the tap water supply into a relatively purified water supply and a reject water supply having impurities concentrated therein. A water purifying unit in accordance with the present invention does not separate the flow of water through the purifying unit. In view of the differences between the reverse osmosis water purification system described in Burrows and the filter system described in Bailey we do not believe that it is appropriate to attempt to combine the teaching of these two documents. We also submit that even if the teachings of these documents were combined, they would not result in a water purifying unit in accordance with the presently claimed invention. Thus, the Applicants believe that the dependent Claim 1 is patentable under the requirements of 35 U.S.C. § 103(a) over the combined teachings of Bailey and Burrows and that, as the presently rejected claims 2, 14, 15 and 17 to 19 properly further define the claimed invention, Claims 2, 14, 15 and 17 to 19 are likewise patentable over the combined teachings of Bailey and Burrows.

Appl. No. : 10/017,507  
Filed : December 13, 2001

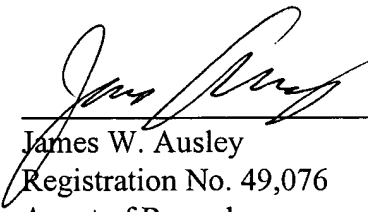
### SUMMARY

From the foregoing, the Applicants believe that the application as currently amended is in a condition ready for allowance and respectfully requests prompt issuance of a Notice of Allowability. The Applicants believe that this amendment is fully responsive to the rejections made by the Examiner in the Office Action, however should there remain any further impediments to the allowance of this application that might be resolved by a telephone conference, the Examiner is respectfully requested to contact the Applicants' undersigned representative at the indicated telephone number. Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 9/15/03

By:   
James W. Ausley  
Registration No. 49,076  
Agent of Record  
Customer No. 20,995  
(909) 781-9231

R:\DOCS\UWA\UWA-6623.DOC : ac  
091103